

## ABSTRACT

A self-assembled monolayer (SAM) is fabricated using either a semi-fluorinated sulphur containing compound, or a semi-fluorinated silane derivative and compressed carbon dioxide (CO<sub>2</sub>) as the solvent medium. The temperature and/or pressure of the compressed CO<sub>2</sub> may be varied during the fabrication process to improve the molecular packing density of the monolayer.

By using compressed CO<sub>2</sub> as the solvent medium, monolayers with good molecular packing density can be fabricated relatively quickly without the use of environmentally unfriendly solvents.